
IT Plan – Agency Submitted

801 DEPT OF TRANSPORTATION

Version: 2009-B-01-00801

Project: Infrastructure

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Agency IT Plan Contact Data

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Review of Agency's IT Architecture

Please view [the spreadsheet at the end of this report](#). Thanks Russ Buchholz

Planned Infrastructure Activities and Changes

Please view [the document at the end of this report](#). Thanks Russ Buchholz

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1. If applicable, describe the reason for any extraordinary increase or decrease in your infrastructure costs.

Rate increases with: ConnectND, ITD to include Application and Server Hosting, Programming and Analyst Cost increase on an average of 15% to 30% overall. Increase in electronic storage requirements (EDMS, FileNet, Aerial Photogrammetry), and moving from a port charge system to a Technology Fee (\$30.75 to \$43.50), which is approximately a 31% increase, which this state agency will incur.

2. Total number of desktop computers: 604
Number of desktops for which you are requesting replacement funding: 340
Average replacement cost/desktop: 1,200

3. Total number of laptop computers: 405
Number of laptops for which you are requesting replacement funding: 103
Average replacement cost/laptop: 2,000

What state planning region are these desktop/laptop computers located?

Region 1	49	2	46	3	48	4	54	5	65	6	46	7	711	8	39
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4. What percentage of these pcs are running the following operating systems:

(total should be equal to 100%)

Open Source OS	0 %
MAC OS	0 %
Windows Vista	0 %
Windows XP	100 %
Other	0 %

5. What additional expenditures are being paid out of non-appropriated funds?

Please explain:

None

IT Asset Management Plan

IT Asset Management Plan

NDDOT being a participating and active member of Enterprise Architecture governance has adopted the recommendations and follows Enterprise Architecture standards (G003-02) for PC Life Cycle Management Guideline to maintain a 4 year replacement cycle for computer hardware equipment. Computer equipment is procured from a contract that includes statewide standardized equipment. In-house resources will be used for all phases of procurement, setup/installation and final testing. This is a part of normal operating expenses and is entered into our base operating expense in the biennium budget. A written computer and printer replacement plan is in place for the standard replacement cycle, it includes budget dollars and support personnel. FrontRange Information Technology Service Management (ITSM) tools are used to capture h/w s/w inventory. ITSM has s/w discovery tools to capture the s/w loaded on each system to maintain license compliance with contractual agreements.

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Costs –

Base Cost - \$2,970,656

Licensing \$725,797 with an estimated increase of \$162,507

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	CURRENT APPROPRIATION	BUDGET REQUEST	OPTIONAL ADJUSTMENTS	REQUEST PLUS OPTIONALS	SUBSEQUENT BIENNIUM
IT5110 SALARIES - PERMANENT	\$0	\$2,323,248	\$0	\$2,323,248	\$0
IT5111 ADDITIONAL SALARIES	\$2,834,746	\$0	\$0	\$0	\$0
IT5130 TEMP SALARIES	\$0	\$78,646	\$0	\$78,646	\$0
IT5140 OVERTIME	\$0	\$23,228	\$0	\$23,228	\$0
IT5160 FRINGE BENEFITS	\$0	\$726,098	\$0	\$726,098	\$0
IT5310 IT SOFTWARE AND SUPPLIES	\$956,434	\$1,142,741	\$0	\$1,142,741	\$1,155,000
IT5510 IT EQUIPMENT UNDER \$5000	\$1,030,822	\$1,024,322	\$0	\$1,024,322	\$1,028,000
IT6010 IT DATA PROCESSING	\$5,379,176	\$5,414,386	\$3,123,371	\$8,537,757	\$8,523,000
IT6020 IT COMMUNICATIONS	\$1,130,091	\$1,146,188	\$0	\$1,146,188	\$1,192,000
IT6030 IT CONTRACT SERVICES & REPAIRS	\$1,657,066	\$1,582,466	\$391,042	\$1,973,508	\$2,485,000
IT6930 IT EQUIPMENT OVER \$5000	\$389,897	\$275,806	\$0	\$275,806	\$0
Total Budget:	\$13,378,232	\$13,737,129	\$3,514,413	\$17,251,542	\$14,383,000
200 HIGHWAY FUND - 200	\$11,672,967	\$11,745,712	\$3,514,413	\$15,260,125	\$12,338,000
201 MOTOR VEHICLE OPERATING - 201	\$1,402,995	\$1,679,099	\$0	\$1,679,099	\$1,810,000
700 FLEET SERVICES FUND - 700	\$302,270	\$312,318	\$0	\$312,318	\$235,000
Total Funding:	\$13,378,232	\$13,737,129	\$3,514,413	\$17,251,542	\$14,383,000

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Project: 154 Drivers License System Rewrite

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Agency Priority - 1

Project Type: Major enhancement/upgrade

Project description

Initiation of the four year project to rewrite the Driver License master Systems (DL1 & DL3). The current systems are written in ADABAS and are becoming increasingly more difficult to maintain as technology is moving into Web based applications and relational databases. The system, by nature, requires high maintenance due to the impact of frequent legislature changes (both State and Federal) and administrative requirements.

Briefly describe the business need or problem driving the proposed project.

The DL3 has been earmarked as a priority system by the Information Technology Dept and the Dept of Transportation for replacement due to the complexity, application requirements and the network interfaces needed. As technology progresses, we are losing the programming resources needed to support the application and the cost of maintenance continues to increase. ITD has announced that they intend to phase out ADABAS within the next five to ten years.

Describe how the project is consistent with the organizations mission.

Driver safety is a primary concern of the Department.

Describe the anticipated benefits of the project and who will derive the benefits.

The system will be rewritten using the latest technology, a relational database and the ability of the division to manage many of their own legislative changes and driver maintenance requirements.

Describe the impact of not implementing the project.

At some point in the not to distant future we will no longer have the resources available to maintain the application internally and the cost of maintenance will become cost prohibitive.

Identify any risks associated with implementing this project and explain how the risks will be mitigated.

The system is extremely complex, so highly skilled resources will have to be allocated to insure a successful project completion. The existing system will also need to be maintained until the completed project is fully implemented.

Describe the additional costs?

The total cost of the project is estimated to be \$15, 291,200.00. This cost would be over two bienniums. (based on responses to the Request for Information issued on November 28, 2007. Estimated ran from \$12 million to \$20 million dollars.

Enter any additional costs for the project that are not included in IT Object Codes used in the Project Cost Screen?

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Additional Costs? -

\$0

Optional Project Costs -

Total Project Cost? -

\$0

Tot Proj Costs + Optionals -

\$0

What additional expenditures are being paid out of non-appropriated funds?

None.

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		CURRENT APPROPRIATION	BUDGET REQUEST	OPTIONAL ADJUSTMENTS	REQUEST PLUS OPTIONALS	SUBSEQUENT BIENNIUM
IT6030	IT CONTRACT SERVICES & REPAIRS	\$0	\$0	\$7,500,000	\$7,500,000	\$7,500,000
	Total Budget:	\$0	\$0	\$7,500,000	\$7,500,000	\$7,500,000
200	HIGHWAY FUND - 200	\$0	\$0	\$7,500,000	\$7,500,000	\$7,500,000
	Total Funding:	\$0	\$0	\$7,500,000	\$7,500,000	\$7,500,000

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Project: 228 Registration Card Printer Replacement

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Agency Priority - 3

Project Type: Major enhancement/upgrade

Project description

The current contract with ITI Technology expires in 2010 and an Request For Proposal (RFP) will need to be issued in 2009 for a replacement.

Briefly describe the business need or problem driving the proposed project.

Required in order to send registration cards and tabs to the public. Alternative solutions could be using 8 x 11 1/2 format instead of card stock.

Describe how the project is consistent with the organizations mission.

Registration dollars provide the funds needed to maintain our highway infrastructure.

Describe the anticipated benefits of the project and who will derive the benefits.

New technology to provide better service to the public. Moving toward more user friendly web based applications to meet the public needs when ordering.

Describe the impact of not implementing the project.

Unable to issue registration confirmations.

Identify any risks associated with implementing this project and explain how the risks will be mitigated.

The different processes will create a learning curve for the branch office and the DOT mailroom personnel.

Describe the additional costs?

Enter any additional costs for the project that are not included in IT Object Codes used in the Project Cost Screen?

Additional Costs? -

Optional Project Costs -

Total Project Cost? -

\$0

Tot Proj Costs + Optionals -

\$0

What additional expenditures are being paid out of non-appropriated funds?

Cost based on a registration card issuance of \$.40 but will not be confirmed until responses are received from vendors.

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		CURRENT APPROPRIATION	BUDGET REQUEST	OPTIONAL ADJUSTMENTS	REQUEST PLUS OPTIONALS	SUBSEQUENT BIENNIUM
IT6010	IT DATA PROCESSING	\$0	\$6,000		\$6,000	\$0
IT6030	IT CONTRACT SERVICES & REPAIRS	\$0	\$360,000		\$360,000	\$360,000
	Total Budget:	\$0	\$366,000		\$366,000	\$360,000
201	MOTOR VEHICLE OPERATING - 201	\$0	\$366,000		\$366,000	\$360,000
	Total Funding:	\$0	\$366,000		\$366,000	\$360,000

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Project: 236 Department Wide Electronic Forms Solution

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Agency Priority - 6

Project Type: Ongoing initiative

Project description

We would like to provide FileNet access to all users, including the 350 section employees. This would allow us to create forms electronically and have the ability to route to anyone in the DOT.

Briefly describe the business need or problem driving the proposed project.

As we upgrade forms from Omni form to another solution, quite often FileNet eForms is the tool of choice so we can do workflow and add documents directly in FileNet BPM. Because section employees cannot access FileNet we are limited to using this solution for forms only used in the Central Office and the main District offices.

Describe how the project is consistent with the organizations mission.

The NDDOT is in charge of providing a transportation system that safely moves people and goods. IT plays an integral part with the department to fulfill its mission.

Describe the anticipated benefits of the project and who will derive the benefits.

Streamline business processes using BPM workflow for electronic forms department wide. Easier sharing of forms and form data with Districts and Sections.

Describe the impact of not implementing the project.

Since Omniforms is no longer a supported application we will continue to redesign forms in alternative solutions. We will be forced to revert back to paper processes for forms that are used in the sections since there is no other electronic form tool that allows for workflow throughout the department.

Identify any risks associated with implementing this project and explain how the risks will be mitigated.

Higher cost for FileNet.

Describe the additional costs?

Enter any additional costs for the project that are not included in IT Object Codes used in the Project Cost Screen?

Additional Costs? -

Optional Project Costs -

Total Project Cost? -

\$0

Tot Proj Costs + Optionals -

\$0

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What additional expenditures are being paid out of non-appropriated funds?

\$193,200 is for monthly FileNet fee (\$23 x 350 section employees x 24 months).

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IT6010	IT DATA PROCESSING	\$0	\$193,200		\$193,200	\$193,200
	Total Budget:	\$0	\$193,200		\$193,200	\$193,200
200	HIGHWAY FUND - 200	\$0	\$193,200		\$193,200	\$193,200
	Total Funding:	\$0	\$193,200		\$193,200	\$193,200

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Project: 249 Asset Management Connection Software

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Agency Priority - 2

Project Type: New initiative

Project description

The North Dakota Department of Transportation has been performing pavement analysis for the past twelve plus years. We are currently utilizing two applications to carry out the analysis, dTIMS and PONTIS. The majority of our roadway data resides and is maintained thru a mainframe solution. The dTIMS software was upgraded to dTIMS CT Enterprise within the last year. PONTIS is currently only available as a desktop version.

Briefly describe the business need or problem driving the proposed project.

To combine all the roadway data and pavement analysis data into one usable system to provide management with the reports and misc. tools to make informed decisions and track DOT assets. In the future, we anticipate this being a Federal requirement.

Describe how the project is consistent with the organizations mission.

The mission of the DOT is to provide a transportation system that safely moves people and goods (safe roadways).

Describe the anticipated benefits of the project and who will derive the benefits.

1. Creation of reports accessible throughout the DOT, 2. Performance curve recommendations. 3. Varying levels of reports based on levels of management - (a) Upper Management Reports, (b) District Reports, (c) Reports can be exported into an Excel spreadsheet and most likely as a PDF document, (d) Ability to create reports in a PDF format. 4. GIS reporting and display capabilities

Describe the impact of not implementing the project.

Inefficiency of having to use multiple systems to pull information to best place dollars to better our transportation system.

Identify any risks associated with implementing this project and explain how the risks will be mitigated.

None

Describe the additional costs?

Enter any additional costs for the project that are not included in IT Object Codes used in the Project Cost Screen?

Additional Costs? -

Optional Project Costs -

\$0

Total Project Cost? -

\$0

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Tot Proj Costs + Optionals -

\$0

What additional expenditures are being paid out of non-appropriated funds?

None - The NDDOT needs to be able to do analysis of data in payments, bridges and roadway inventory. To introduce the concepts of Asset Analysis capabilities. Asset reports from pavement, bridge and roadway information. Method to review the results (reports, GIS, spreadsheets).

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IT6010	IT DATA PROCESSING	\$1,000,000	\$28,000		\$28,000	\$81,120
IT6030	IT CONTRACT SERVICES & REPAIRS	\$0	\$475,000		\$475,000	\$0
	Total Budget:	\$1,000,000	\$503,000		\$503,000	\$81,120
200	HIGHWAY FUND - 200	\$1,000,000	\$503,000		\$503,000	\$81,120
	Total Funding:	\$1,000,000	\$503,000		\$503,000	\$81,120

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Project: 82 PIQ / Employee Information Re-write

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Agency Priority - 5

Project Type: Major enhancement/upgrade

Project description

Need to re-write PIQ to be able to remove it from Lotus Notes due to the implementation of PeopleSoft. PeopleSoft does not have a module to replace this HR position requirement.

Briefly describe the business need or problem driving the proposed project.

We need to move PIQ of Lotus Notes so that we can remove Lotus Notes and eliminate the Licensing costs that are associated with it. It would be nice to have one application that would be used across state agencies.

Describe how the project is consistent with the organizations mission.

The NDDOT is in charge of providing a transportation system that safely moves people and goods. IT plays an integral part with the department to fulfill its mission.

Describe the anticipated benefits of the project and who will derive the benefits.

With our goal of moving off and eliminating Lotus Notes, this would be one more step in that direction. Enhancements to the current application. Web based application.

Describe the impact of not implementing the project.

We would continue to pay Lotus Notes Licensing fees as well as Microsoft Outlook fees. The additional cost of keeping Lotus Notes is \$33,718 per biennium.

Identify any risks associated with implementing this project and explain how the risks will be mitigated.

None.

Describe the additional costs?

The additional cost of keeping Lotus Notes per biennium.

Enter any additional costs for the project that are not included in IT Object Codes used in the Project Cost Screen?

Additional Costs? - \$0

Optional Project Costs -

Total Project Cost? - \$0

Tot Proj Costs + Optionals - \$0

What additional expenditures are being paid out of non-appropriated funds?

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Estimates are based on ITD's proposed 09/11 rates.

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IT6010	IT DATA PROCESSING	\$0	\$235,537		\$235,537	\$0
	Total Budget:	\$0	\$235,537		\$235,537	\$0
200	HIGHWAY FUND - 200	\$0	\$235,537		\$235,537	\$0
	Total Funding:	\$0	\$235,537		\$235,537	\$0